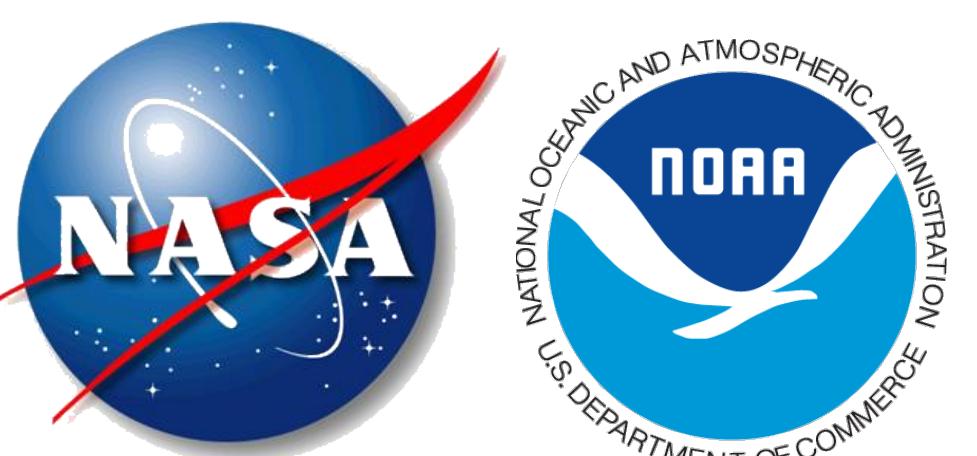




Direct Broadcast Software: CSPP and IMAPP



Support for Operational Environmental Applications

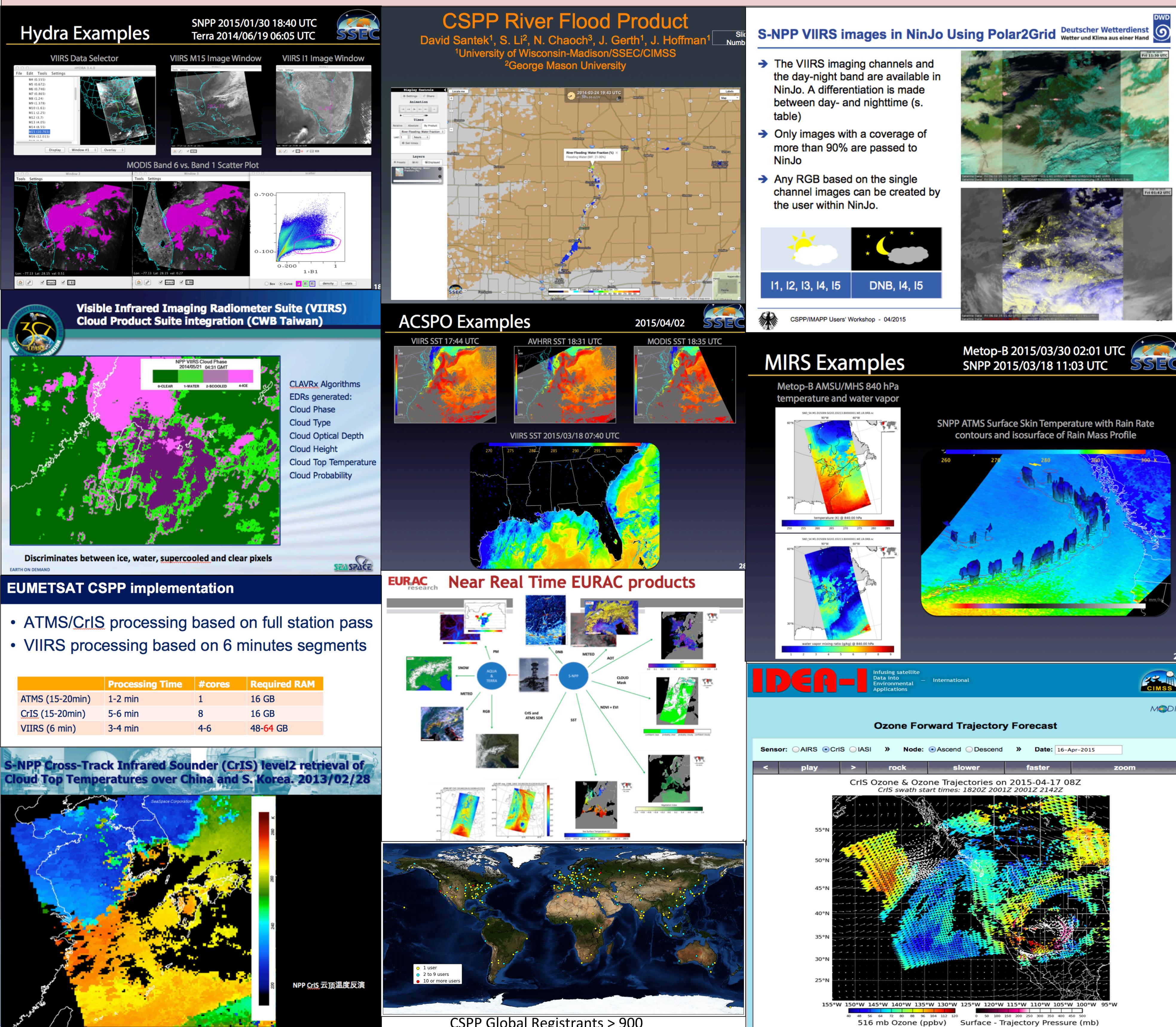
Kathleen Strabala, Liam Gumley, Allen Huang, Graeme Martin, Scott Mindock, Ray Garcia, David Hoese, Nick Bearson, Jessica Braun, James Davies, Rebecca Cintineo, Elisabeth Weisz, Nadia Smith, Bill Smith Sr., Robert Aune[†], Jeff Key[†], Brad Pierce[†]

Cooperative Institute for Meteorological Satellite Studies, University of Wisconsin-Madison [†]NOAA/NESDIS/STAR

NOAA Community Satellite Processing Package (CSPP)

Supports Suomi-NPP and the Direct Broadcast Polar Orbiter Community Since 2011

- S-NPP Sensor Data Records (SDRs).
 - VIIRS, ATMS, CrIS
- VIIRS Environmental Data Records (EDRs)
 - Active Fires, Cloud Mask, AOT, SSST, Surface Reflectance, NDVI, EVI, Surface Type, LST EDRs
- VIIRS Imagery EDRs.
- NOAA Unique CrIS/ATMS Processing System (NUCAPS) EDR
 - Hyperspectral Sounding Retrievals.
- Wisconsin Single Field-of-View Hyperspectral Sounding Retrievals.
 - CrIS, AIRS, IASI
- NOAA Microwave Integrated Retrieval System (MIRS)
 - S-NPP ATMS, NOAA-18, 19 and Metop-A, B AMSU-A and MHS.
- NOAA Clouds from AVHRR Extended (CLAVR-x)
 - S-NPP VIIRS, NOAA-18, 19, Metop-A,B AVHRR, and Aqua and Terra MODIS.
- International ATOVS Processing Package (IAPP) Retrieval Software
 - NOAA-15, 16, 18, 19, and Metop-A,B HIRS, AMSU-A and MHS
- NOAA Advanced Clear-Sky Processor for Oceans (ACSPo) SST retrievals
 - S-NPP VIIRS, NOAA-15, 16, 17, 18, 19, Metop-A, B AVHRR, and Aqua and Terra MODIS



NASA International MODIS/AIRS Processing Package (IMAPP)

Supports NASA Aqua and Terra Satellites Since 2000

- C6 MODIS Level 2 Atmosphere and Polar Products.
 - MODIS Cloud Optical Properties & Cloud Top Properties (MOD06), Aerosols (MOD04), Profiles & TPW(MOD07).
 - Ice Surface Temperature, Ice Concentration, Ice Mask, Inversion Strength, Inversion Depth.
- MODIS Surface Reflectance (MOD09).
- MODIS BRDF (w/Crystal Schaaf).
- Globally Configurable NWP Model that Assimilates MOD06 products.
- Air Quality Forecasting Application (IDEA-I) for Aerosols (MODIS) and Stratospheric Ozone Intrusions (AIRS,CrIS, IASI).
- Airline Hazard Software (Overshooting Tops- Kris Bedka in GELOCAT).
- GeoTIFF Web Mapping Service Display Software.
- Polar2Grid Reprojection Tool.
- HYDRA2 Multispectral Data Analysis Toolkit.
- AIRS L1 and L2 Standard Products (V6).
- AIRS UW HSRTV single field of view retrievals.
- MODIS True Color in Google Earth Software Package (DB Google Earth).
- Complete Aqua and Terra Direct Broadcast Processing suite
 - Supporting Mac, Windows and Linux.

